VERSION DESCRIPTION DOCUMENT - TEMPLATE INSTRUCTIONS

This document is a skeleton Version Description Document (VDD) intended for use by Code 582 (Flight Software Branch) personnel as the basis for a mission-specific Flight Software or related product delivery (e.g., simulation products).

Note that the instructions and change history pertain to the template itself. These sections should be deleted when preparing the VDD. The following style conventions are used throughout:

Text in this style (style name "Normal") is used for text that is equally applicable to the entire VDD and should be included in the Version Delivery Description without modification. All section headings are in the same category (although their style names vary depending on outline level).

[Text in this style (style name "TAILORING ADVICE") is advice on how to tailor the text in any specific section.]

As the VDD is developed, the generic [TAILORING ADVICE] text should be replaced with material that applies to the specific project.

GENERAL TAILORING GUIDELINES

This section includes general tailoring guidelines applicable to the whole VDD. Specific recommendations are included in applicable sections.

All sections should be addressed, but the level of detail is left up to the Team based on flight software complexity and customer needs/expectations. The length and level of detail of the VDD should be commensurate with the scope and complexity of the project. Section headings may be added where necessary, but existing headings should not be modified or deleted. If a particular section is not applicable to the specific VDD under production, that fact should be noted under the section heading, together with a brief explanation.

Finally, in the target VDD, this entire section ("Instructions") and the Change History should be deleted.

VERSION DESCRIPTION DOCUMENT – TEMPLATE UPDATE HISTORY

[This table shows the update history for the VDD Template. This section should be deleted when creating an actual VDD.]

Version	Date	Description	Affected Pages
0.1	10/13/03	Table of Contents and "First Draft"	All
0.2	10/14/03	Modify to be in Memo format, include comments	All
0.3	10/27/03	Incorporate comments from reviewers	All
0.4	10/29/03	Incorporate comments from different reviewers	All
0.5	12/10/03	Incorporate comments from E. Shell	All
0.6	01/06/04	Incorporate comments from L. Hoge, D. Simpson, Added Acronym List	All
0.7	06/08/04	Incorporated additional changes from Dan Berry	All
0.8	06/09/04	Formatting changes only	All
0.9	06/25/04	Change of name to "Version Delivery Description"	All
1.0	7/30/04	Updates resulting from 7/29/04 walkthrough (name changed back to "Version Description Document")	All
1.1	9/30/04	Changes resulting from e-mail responses to Branch review, and Standards CCB discussions (9/29 meeting)	
1.2	11/3/05	-Added Title Page -Implemented DCRs #135, 136 and 137	3 4 and 5

FLIGHT SOFTWARE BRANCH

FSW VERSION DESCRIPTION DOCUMENT

[MISSION ACRONYM]

BUILD: [BUILD IDENTIFIER]

1.0 FSW VERSION DESCRIPTION

1.1 PURPOSE AND SUMMARY

[Explain the purpose of this Build version of the FSW (or related product). Summarize major new functionalities, features and/or problems resolved in this version.

[If this Build of FSW is integrated with FSW from another FSW subsystem (e.g., ACS FSW is dependent on a C&DH FSW version), state the other subsystem and the version number plus release date of that product. Example: The MAP ACE FSW version X.Ya is compiled and linked with MAP ROS FSW version x.ya released on xx/yy/zz and MAP GRSN FSW version x.ya released on xx/yy/zz.]

[If this FSW delivery is dependent on a particular version of simulators, tools, databases, etc. identify these dependencies.]

1.2 NEW/CHANGED FUNCTIONALITY IN THIS VERSION

Table 1.2-1 identifies Mission CCRs that have been implemented in this FSW version.

Table 1.2-1 –Mission CCRs Implemented in this Version

Mission CCR #	Title
100	Implement Optical Select Mechanism
200	

Table 1.2-2 identifies new FSW functionality that has been implemented and is integrated into this FSW version [all functionality not previously delivered must be included]. Requirement references are included.

Table 1.2-2 – New Functionality in this Version

No.	FSB DCR # (or N/A)	Requirements	High Level Description of Functionality
1	200	2000	Memory Load and Dump
2	210	3120, 3140, 3160	Lamp Mechanisms

Table 1.2-3 identifies changes to FSW functionality from a previously delivered FSW version and the DCRs associated with these changes.

Table 1.2-3 – Changes to Previously Delivered Functionality

No.	FSB DCR # (or N/A)	Requirements	Functionality or Change Description
1	271	4135	Update Optical Select Mechanism Absolute Move Table

1.3 MISSING PLANNED FEATURES AND KNOWN PROBLEMS

Table 1.3-1 identifies functions that were originally planned for this release, but are absent [make sure to provide reason for absence].

Any workarounds that may apply are identified.

Information on currently open DCRs is available at [identify the team's web site URL].

Refer to the Delivery Letter for any additional DCRs submitted after preparation of this VDD.

Table 1.3-1 – Functions absent from this Release

No.	Description	Reason for Absence	Affected Requirement or Component	Workaround	Planned Delivery
1	Diagnostics	Implementation not ready.	Req. 3004.3	Analyze memory dumps for diagnostic purposes.	Version 2.3
2	Reconsider calculation in mechmove_Compute_Wait_Count.	Problem found during Build integration test.	Optical Mechanisms Task	None required at this time.	Version 2.4

1.4 DEVELOPMENT TOOL VERSIONS ASSOCIATED WITH THIS FSW VERSION

[Identify the versions of the Real-Time Operating System (RTOS) and any other Commercial Off-The-Shelf (COTS) software products (e.g, a script language) that are integrated with this FSW version. Add additional rows to the table as needed]

Table 1.4-1 identifies the versions of development tools used to generate this FSW version:

Table 1.4-1 – Development Tool Versions Associated with this FSW Version

Tool Type.	Tool Name	Version Used
RTOS		
Compiler		

2.0 DELIVERED PRODUCTS

Table 2-1 identifies the locations of FSW products relevant to this FSW Build. The version or date of the Build and where the product can be located are provided. Changes from a previous VDD are identified.

Table 2-1 – Delivered Products and their Locations

Software Element	Changed with this Version?	New Version or Date	Location
Executable for this build			
Installation Procedures & Special Instructions **(See Section 3.0)**			
Source Code of this FSW Build			[Provide CM Tool retrieval label]
FSW Build Plan			
Annotated S/W Detailed Design Docs			
Ground System T&C Database			
Ground System Scripts developed by FSB			
Simulator and Test Data Generator Software [customize as appropriate]			
Executable - Ground Tools associated with FSW (tools to build stored command loads, etc.)			
Source Code - Ground Tools associated with FSW (tools to build stored command loads, etc.)			
Unit Test Procedures			
Unit Test Data			
Unit Test Results			
FSW Make Files			
Linker & Compiler Configuration Files			
[Add items as necessary]			

3.0 INSTALLATION PROCEDURES

Table 3-1 identifies the nominal FSW Installation Procedure(s) for this FSW Build onto the intended target system (including the commercial applications used and the configuration settings). The procedure version identifier, the date of the procedure and where it can be located are also provided.

[Add a line to this table for each target that has a unique installation procedure]

Table 3-1 FSW Installation Procedure(s)

Destination (Target System)	Filename	Version and Date	Location
Destination #1	Installation Proc 1	Version 1.0, 10/20/03	Location 1
Destination #2	Installation Proc 2	Version 1.4, 10/24/03	Location 2

4.0 CONFIGURATION SUMMARY AND VERSION IDENTIFICATION

[Provide the location of the CM system where this version can be found, and provide the CM Tag reference for this version.]

[Provide the means for a user to identify this particular version of FSW once loaded onto the target hardware. E.g., checksum verifications, version ID downlinked in telemetry, etc. Version identifiers are required for Boot PROM, EEPROM, RAM, etc. as appropriate for the system being delivered.]

ACRONYMS

ACS ..... Attitude Control System

C&DH ..... Command and Data Handling

CM ..... Configuration Management

COTS ..... Commercial Off-The-Shelf

DCR ..... Discrepancy/Change Request

ETU ..... Engineering Test Unit

FSB ..... Flight Software Branch

FSW ..... Flight Software

I&T ..... Integration & Test

RTOS ..... Real-Time Operating System

T&C ..... Telemetry and Command

URL ..... Universal Resource Locator

VDD ..... Version Description Document